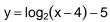
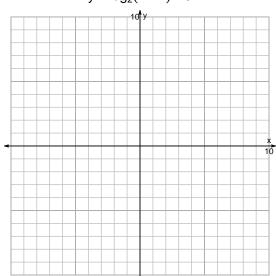
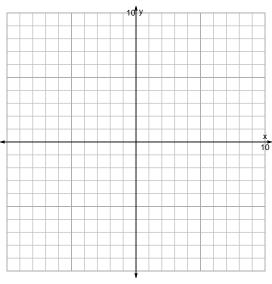
s18quiz: EXP LOG (QUIZ v243)

1. Graph $y = \log_2(x-4) - 5$ and $y = 2^{x-6} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.





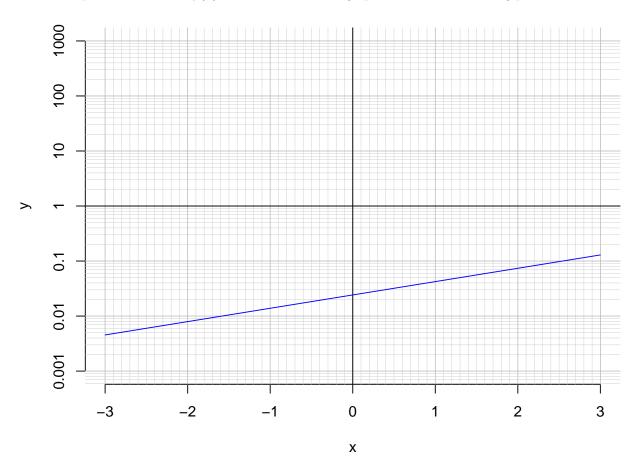
$$y = 2^{x-6} + 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-4}{7}\right) \cdot 10^{-5t/3}$$

3. An exponential function $f(x) = 0.0242 \cdot e^{0.558x}$ is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(-2.5).
- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(0.05)$.